

REMARKS

Reconsideration and allowance of the subject application in view of the foregoing amendments and the following remarks is respectfully requested.

Claims 1, 2 and 4 have been cancelled and new Claim 14 added. New Claim 14 is basically original Claim 1 plus the limitations of Claims 2 and 4 and additional editing for clarification. In addition, Claims 3, 5-13 are now dependent on Claim 14. In re-writing and preparing Claim 14, care has been used so that support for each of the limitations is believed to be clearly set forth in the Specification as for example, on pages 6 and 7 of the Specification.

Original Claims 1-13 were rejected under 35 USC 102(e) as being anticipated by Patent Application Publication No. US2003/0040173A1 to Fonash et al. As stated by the Examiner,

...Fonash et al. teach a method for manufacturing a device which comprises forming a lower electrode (14) on a substrate; forming a sacrificial layer pattern on the substrate including the lower electrode 16; forming an upper electrode 16; forming an upper electrode on the substrate including the sacrificial layer pattern (18); removing the sacrificial layer so that a nano gap (20) is formed between the lower electrode and the upper electrode; and adsorbing conductive organic molecules (21) between the upper electrode and the lower electrode in the nano gap. (See Figure 1; Sections 0012, 0015, 0035 and 0048).

It is respectfully submitted that amended Claim 14 and dependent Claims 3 and 5-13 are now clearly and patentably distinguished over the cited reference. To be more specific, new

Claim 14 now calls for a unique combination which includes the steps of providing a substrate of resistive insulating material having an upper surface and forming an electrode on the upper surface of the substrate. The Claim also calls for forming a predetermined size of a sacrificial layer pattern on an entire upper surface of the substrate including the lower electrode; and using a photo etching technique to remove a portion of the sacrificial layer excluding a predetermined area covering the lower electrode so that the sacrificial layer surrounds the lower electrode. New Claim 14 also calls for covering the entire remaining surface from step c including the sacrificial layer surrounding the lower electrode with a polymer and forming a polymer pattern with a line width of 50 nm by an electron beam etching technique to expose the sacrificial layer and the substrate on which the lower electrode is formed. It is respectfully submitted that this step is not disclosed or suggested by the cited reference.

In addition to the above, new Claim 14 calls for forming an upper electrode by depositing metal on an entire upper surface from step d and then removing metal on the polymer pattern by a lift off process so that an upper electrode is formed on the sacrificial layer surrounding the lower electrode and an exposed portion of the insulator. Removing the sacrificial layer so that a nano gap is formed between the upper electrode and the lower electrode and adsorbing conductive organic materials between the upper electrode and the lower electrode are also claimed. It is respectfully submitted that this is a unique combination of elements that is not disclosed or suggested by the prior art. Accordingly, it is Applicant's contention that new Claim 14 and dependent Claims 3, 5-13 are now clearly and patentable distinguished over the cited art.

Applicant's position is further supported by Section 2131 of the MPEP. As set forth therein:

TO ANTICIPATE A CLAIM, THE REFERENCE
MUST TEACH EVERY ELEMENT OF THE
CLAIM.

A CLAIM IS ANTICIPATED ONLY "A claim is
anticipated only if each and every element as set forth
in the claim is found either expressly or inherently
described in a single prior art reference." (cite

omitted)

It is Applicant's contention that in the present Application each and every element of new Claim 14 is not taught or suggest by the cited reference. Accordingly, it is Applicant's contention that new Claim 14 and dependent Claims 3 and 5-13 are patentable and should be allowed.

All objections and rejections having been addressed, it is respectfully submitted that the present application should be in condition for allowance and a Notice to that effect is earnestly solicited. Prompt favorable action is requested.

Respectfully submitted,

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